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Substitut	e for form 1449A/F	PTO		Complete	Complete if Known		
				Application Number	10/626,984		
IN	FORMATION	DISCLOS	SURE	Filing Dat	July 25, 2003		
ST	ATEMENT B	Y APPLIC	CANT	First Named Inventor	Kawai, et al.		
	(use as many shee	ets as necess	sary)	Art Unit	Unassigned		
				Examiner Name	Unassigned		
Sheet	1	of	2	Attorney Docket Number	013.0207.US.UTL		

	U.S. PATENT DOCUMENTS						
		Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where		
Examiner Initials*	Cite No.1	Number - Kind Code ² (# known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear		
_/LH/		US-5,477,451	12/19/1995	Brown et al.			
//		US-5,799,276	08/25/1998	Komissarchik et al.			
		US-5,867,799	02/02/1999	Lang et al.			
		US-6,026,397	02/15/2000	Sheppard			
		US-6,148,102	11/14/2000	Stolin			
		US-6,598,054	07/22/2003	Schuetze et al.			
		US-6,137,911	10/24/2000	Zhilyaev			
W		US-2002/0184193	12/05/2002	Cohen			
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	FOREIGN PATENT DOCUMENTS						
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Examiner	/Leon Harper/	Date	05/25/2007
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*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Mail Stop IDS, PO Box 1450, Alexandria, VA 22313-1450.

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Complete if Known Substitute for form 1449B/PTO 10/626,984 **Application Number Filing Date** July 25, 2003 INFORMATION DISCLOSURE First Named Inventor Kawai, et al. STATEMENT BY APPLICANT Group Art Unit Unassigned (use as many sheets as necessary)

Examiner Name Unassigned 2 Attorney Docket Number 013.0207.US.UTL Sheet of OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials* Cita Item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
D. SULLIVAN, "Document Warehousing And Text Mining, Techniques For Improving Business Operations, Marketing, And Sales," Chs. 1-3, Wiley Computer Publishing (2001). LINHUI, JIANG, "K-Mean Algorithm: Iterative Partitioning Clustering Algorithm," http://www.cs.regina.ca/~linhui/K_mean_algorithm.html , (2001) Computer Science Department, University of Regina,			
1		http://www.cs.regina.ca/-linhui/K mean_algorithm.html. (2001) Computer Science Department, University of Regina, Saskatchewan, Canada.	
		KANUGO et al., "The Analysis Of A Simple K-Means Clustering Algorithm," pp. 100-109, PROC 16th annual symposium of computational geometry (May 2000).	
		PELLEG et al., "Accelerating Exact K-Means Algorithms With Geometric Reasoning," pp. 277-281, CONF on Knowledge Discovery in Data, PROC fifth ACM SIGKDD (1999).	
$\overline{\mathbf{V}}$		JAIN et al., "Data Clustering: A Review," Vol. 31, No. 3, ACM Computing surveys, (September 1999).	
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Signature	/Leon Harper/	Considered	05/25/2007

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¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO						Complete if Known			
000000000000000000000000000000000000000						Application Number	10/626,984		
INFORMATION DISCLOSURE					:	Filing Date	July 25, 2003		
STATEMENT BY APPLICANT		First Named Inventor	Kawai, K.						
(Use as many sheets as necessary)						Art Unit	2176		
						Examiner Name	Unassigned		
et	<u> </u>	1	of		2	Attorney Docket Number	013.0207.US.UTL		

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Examiner Initials*	cr Cite		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
		Number - Kind Code ^{2 (F known)}			Relevant Passages or Relevant Figures Appear
_/LH/	4	US-5,488,725	01-30-1996	Turtle et al.	
		US-5,058,021	10-08-1991	Ausborn	
		US-6,173,275	01-09-2001	Cald et al.	
		US-6,448,061	09-03-2002	Doerre et al.	
		US-6,510,408	01-21-2003	Marchisio	
		US-6,675,159	01-06-2004	Lin et al.	
		US-6,560,597	05-06-2003	Dhillon et al.	
بلد	4	US-6,701,305	03-02-2004	Holt et al.	
<u></u>		US-6,711,585	03-23-2004	Copperman et al.	
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	FOREIGN PATENT DOCUMENTS						
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Examiner Initials*	Cite No.	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	Τ'	
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Examiner	/Leon Harper/	Date	
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Substitu	te for form 1449B/PTO			·	Complete if Known
				Application Number	10/626,984
INF	ORMATION DIS	CLOSU	JRE	Filing Date	July 25, 2003
STA	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	NT	First Named Inventor	Kawai, K.	
				Art Unit	2176
	(Use as many sheets as ne	ecessary)		Examiner Name	Unassigned
Sheet	2	of	2	Attorney Docket Number	013.0207.US.UTL

		NON PATENT LITERATURE DOCUMENTS	
Examiner Cite maga		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/LH/		CHRISTINA YIP CHUNG et al, "Thematic Mapping – From Unstructured Documents To Taxonomies," CIKM'02, November 4-9, 2002, pp. 608-610, ACM, McLean, Virginia, USA.	
		HIROYUKI KAWANO, "Overview of Mondou Web Search Engine Using Text Mining And Information Visualizing Technologies," IEEE, 2001, pp. 234-241.	
		JAMES OSBORN et al "JUSTICE: A Judicial Search Tool Using Intelligent Concept Extraction," ICAIL-99, 1999, pp. 173-181, ACM.	
		CHEN AN et al "Fuzzy Concept Graph And Application In Web Document Clustering," 2001, pp. 101-106, IEEE.	
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Examiner Signature	/Leon Harper/	Date Considered	05/25/2007	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known 10/626,984 **Application Number** 7/25/2003 Filing Date First Named Inventor Kawai et al. **Art Unit** 2176 Examiner Name Unassigned 013.0207.US.UTL Attorney Docket Number

	-		U.S. PATENT	DOCUMENTS	
Examiner nitials*	Cite No.1	Document Number Number - Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
7LH/		US-2003/0110181	06-12-2003	Schuetze et al.	
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	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶	
7LH/		WO 03/060766	07-24-2003	Elucidon AB			
		EP 1 024 437	08-02-2000	Xerox Corporation			
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PMATION D	ISCLOSII	PF Filing Date	7/25/2003			
	· ·	First Named Inventor	Kawai et al.			
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/LH/		F. Can., "Incremental Clustering For Dynamic Information Processing," ACM Transactions On Information Systems, Vol. 11, No. 1, pp. 143-164 (April 1993).	
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Examiner Signature	/Leon Harper/	Date Considere	od 05/25/2007
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RE	Filing Date	7/25/2003
	First Named Inventor	Kawai et al.
NT	Art Unit	2166
	Examiner Name	Leon J. Harper
1	Attorney Docket Number	013 0207 US UTI

			U.S. PATENT	DOCUMENTS	
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/I H/		US-7,155,668	12-26-2006	Holland et al.	
		US-2005/0004949	01-06-2005	Trepess et al.	
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Signature	/Leon Harper/	Considered	05/25/2007

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